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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,335	11/17/2000	Kevin Lefebvre	10005281-1	6005

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EXAMINER	
QUILLEN, ALLEN E	
ART UNIT	**PAPER NUMBER**
2676	

DATE MAILED: 02/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/715,335	LEFEBVRE ET AL.	
	Examiner	Art Unit	
	Allen E. Quillen	2676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-38 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-38 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Double Patenting

1. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefore..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

2. Claims 1, 7 (and 27), 15, 18 and 21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1, 5, 7, 11 and 12 respectively of copending Application No. 09/715253. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

3. Claims 1, 7 (and 27), 15, 18 and 21 are directed to the same invention as that of claims 1, 5, 7, 11 and 12 of commonly assigned Application No. 09/715253. The issue of priority under 35 U.S.C. 102(g) and possibly 35 U.S.C. 102(f) of this single invention must be resolved.

Since the U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP § 2302), the assignee is required to state which entity is the prior inventor of the conflicting subject matter. A terminal disclaimer has no effect in this situation since the basis for refusing more than one patent is priority of invention under 35 U.S.C. 102(f) or (g) and not an extension of monopoly.

Failure to comply with this requirement will result in a holding of abandonment of this application.

4. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 15, 18 and 21 are provisionally rejected under 35 U.S.C. 102(e) as being anticipated by copending Application No. 09/715253 which has common inventors with the instant application.

Based upon the earlier effective U.S. filing date of the copending application, it would constitute prior art under 35 U.S.C. 102(e), if patented. This provisional rejection under 35 U.S.C. 102(e) is based upon a presumption of future patenting of the copending application.

This provisional rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the copending application was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

This rejection may not be overcome by the filing of a terminal disclaimer. See *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991).

5. Claims 31 - 38 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 09/715,253. Although the conflicting claims are not identical, they are not patentably distinct from each other because examiner takes exception to the fact that implementation of the invention requires both hardware and software in order to function.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1-38 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by MacInnis, et al, U.S. Patent 6,501,480.

3. Regarding claim 1, representative of claims 15, 18 and 21, MacInnis discloses a graphical display system (Column 1, lines 45-67; Column 3, lines 29-50; Column 49, lines 1-26), comprising: a first graphics pipeline (Column 6, line 19-21) configured to receive graphical data and to render said graphical data received by said first graphics pipeline; a second graphics pipeline configured to receive graphical data and to render said graphical data received by said second graphics pipeline; a display device configured to display an image; and a compositor

(Figure 2, element 60, Column 5, lines 38-50; Figure 4, elements 80, 94, Figure 10, elements 140, 374; Figure 13, element 59; Column 7, lines 59-62) configured to receive said graphical data rendered by said first graphics pipeline and said graphical data rendered by said second graphics pipeline, said compositor further configured to interface said graphical data received by said compositor with said display device, wherein said image is based on said graphical data received by said compositor (Column 8, lines 61-63).

4. Regarding claim 2, MacInnis discloses the system of claim 1, wherein said first graphics pipeline and said second graphics pipeline simultaneously and in parallel process said graphical data rendered by said first and second graphics pipelines (Column 4, lines 31-36; Column 6, lines 37-41; Column 16, lines 47-49; Column 42, lines 22-26; Column 57, line 36).

5. Regarding claim 3, representative of claim 23, MacInnis discloses the system of claim 1, further comprising: an input device configured to receive an input from a user (Column30, lines 33-36), wherein at least one of said graphics pipelines is configured to selectively super-sample (post filtering, digitized analog video capture, Column 4, lines 11-16; Column 7, lines 66 through Column 8, lines 9; Column 10, lines 25-26; Column 30, lines 43-53) said graphical data rendered by said at least one graphics pipeline based on said input (Column 6, lines 28-30).

6. Regarding claim 4, representative of claims 6, 10, 14, 16 and 19, MacInnis discloses the system of claim 1, wherein: said first graphics pipeline is configured to super-sample said graphical data rendered by said first graphics pipeline; said second graphics pipeline is

configured to super-sample said graphical data rendered by said second graphics pipeline; and said compositor is configured to average data values from said graphical data super-sampled by said first and second graphics pipeline to transmit said averaged data values to said display device (see above; Column 8, lines 61 through Column 9, line 59).

7. Regarding claim 5, MacInnis discloses the system of claim 1, wherein said compositor is configured to interface said graphical data received by said compositor with said display device via a scanning process (Figure 3, peripherals, Column 3, lines 39-41, Column 4, lines 11-16; Column 5, lines 20-23).

8. Regarding claim 7, representative of claims 8, 27, and 28, MacInnis discloses the system of claim 1, further comprising a third graphics pipeline configured to receive a plurality of graphics commands (see above; graphics accelerator with vector coprocessor, Column 57, lines 4-52), said third graphics pipeline configured to transmit each of said graphics commands including three-dimensional graphical data (Column 5, line 53) to other graphics pipelines, said third graphics pipeline further configured to render two-dimensional graphical data (windows, Column 4, lines 51-55; Column 57, lines 4-20) associated with the remaining graphics commands (Column 57, lines 29-31) wherein said compositor is further configured to receive said two-dimensional graphical data rendered by said third graphics pipeline and to interface said two-dimensional graphical data with said display device, and wherein said first and second graphics pipelines are included in said other graphics pipelines (Figures 3 and 4; Column 56, line

58 through Column 59, line 54) in a frame buffer (Column 8, lines 61 through Column 9, line 59).

9. Regarding claim 9, representative of claims 17, 20, 24, 29, MacInnis discloses the system of claim 1, wherein: said first graphics pipeline is configured to receive graphical data transmitted from a graphics application and to receive an input identifying a first coordinate range (Column 4, lines 51-55; Column 15, lines 1-17), said first graphics pipeline configured to discard, based on said first coordinate range, a first portion of said graphical data transmitted from said graphics application, said first portion associated with coordinate values outside of said first coordinate range (Column 15, lines 33-49); and said second graphics pipeline is configured to receive said graphical data transmitted from said graphics application and to receive an input identifying a second coordinate range, said second graphics pipeline configured to discard, based on said second coordinate range, a second portion of said graphical data transmitted from said graphics application, said second portion associated with coordinate values outside of said second coordinate range (Column 6, lines 37-41; Column 21, lines 51-53; Column 22, lines 32-39).

10. Regarding claim 11, representative of claim 13, MacInnis discloses the system of claim 9, wherein said graphical data rendered by said first graphics pipeline corresponds to said second portion discarded by said second graphics pipeline, and wherein said graphical data rendered by said second graphics pipeline corresponds to said first portion discarded by said first graphics

pipeline (Column 6, lines 27-29; Column 17, lines 63-67; Column 21, lines 50-53; Column 24, lines 17-25).

11. Regarding claim 12, MacInnis discloses the system of claim 1, further comprising a graphics application for producing graphical data that defines an object within said image, wherein said graphical data rendered by said first graphics pipeline defines a first portion of said object and wherein said graphical data rendered by said second graphics pipeline defines a second portion of said object (see above; Column 11, lines 8-25).

12. Regarding claim 22, MacInnis discloses the method of claim 21, wherein said interfacing step includes the step of processing said first and second rendered portions to form a set of graphical data, said processing step including the step of enabling said display device to scan said set of graphical data (Column 6, lines 46-67; Column 8, lines 61 through Column 9, line 23).

13. Regarding claim 25, representative of claims 26 and 30, MacInnis discloses the method of claim 21, further comprising the steps of: super-sampling said first portion of said graphical data via said first graphical pipeline; super-sampling said second portion of said graphical data via said second graphical pipeline; and calculating data values included within said graphical data stored in said frame buffer based on said super-sampled portions of said graphical data (see above; Column 8, lines 61 through Column 9, line 59; Column 30, lines 54-67).

14. Regarding claim 31, representative of claims 33, 35, 37, MacInnis discloses the system of claim 1, wherein each of said pipelines is implemented in hardware (Column 5, lines 65 through Column 6, lines 18; Column 9, lines 60 through Column 10, line 3; Column 16, lines 21-32; 47-49; Column 19, lines 40-51; Column 49, lines 30-35).

15. Regarding claim 32, representative of claims 34, 36, 38, MacInnis discloses the system of claim 1, wherein each of said pipelines is implemented in software (Column 3, line 62; Column 4, line 63; Column 49, lines 38-40; Column 51, lines 43-44; Column 59, lines 18-27).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen E. Quillen whose telephone number is (703) 605-4584. The examiner can normally be reached on Tuesday – Friday, 8:30am – noon and 1:00 - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew C. Bella, can be reached on (703) 308-6829.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or FAX'd to:

(703) 872-9314 (for Technology Center 2600 only)

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Sixth Floor (Receptionist), Arlington, Virginia

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number (703) 305-9600 or (703) 305-3800.

Allen E. Quillen
Patent Examiner
Art Unit 2676

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February 6, 2003

MATTHEW C. BELLA
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